

### REMARKS

Claims 1-20 have been cancelled. New claims 21-40 have been added to clarify the scope of the present invention. Thus, claims 21-40 are pending in this application for consideration.

#### Claim Rejections Under 35 U.S.C. § 112

The Examiner rejected claims 1-19 under 35 U.S.C § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In view of the fact that claims 1-19 have been cancelled, this rejection is moot.

#### Claim Rejections Under 35 U.S.C. § 103

The Examiner rejected claims 1-3 and 16-19 under 35 U.S.C § 103(a) as being obvious, and thus unpatentable, over U.S. Patent No. 6,322,430 to Kennedy et al. ("Kennedy") in view of U.S. Patent No. 5,102,290 to Cipolla ("Cipolla"). In view of the fact that claims 1-3 and 16-19 have been cancelled, this rejection is moot. Furthermore, Applicant respectfully submits that new claims 21-40 are patentable over Kennedy and Cipolla for the reasons discussed below.

#### Present Invention

The present invention is directed to an automated method for reconditioning digital discs, such as digital video discs (DVDs) and compact discs (CDs), which allows digital discs to be reconditioned without manual manipulation of the digital discs during the reconditioning process.

In a first aspect of the invention (as set forth in claims 21-33), a plurality of digital discs are placed in a feed area whereby a disc transfer mechanism successively transfers each of the digital discs from the feed area to one or more workstations. At each of the workstation(s), at

least one worktool contacts each of the digital discs so as to at least partially recondition the protective coating of the digital disc. In the preferred embodiment, multiple worktools are used to perform the following steps of the reconditioning process: (1) remove a portion of the protective coating of each of the digital discs without removal of the data underlying the protective coating; (2) wax the protective coating of each of the digital discs; and (3) polish the protective coating of each of the digital discs. Preferably, the disc transfer mechanism then transfers each of the digital discs from the workstation(s) to a receiving cartridge for manual retrieval. As such, the digital discs may be automatically reconditioned without manual manipulation of the digital discs during the reconditioning process.

In a second aspect of the invention (as set forth in claims 34-40), an automated reconditioning process is provided for reconditioning a digital disc placed within a reconditioning apparatus. In operation, at least one worktool contacts the digital disc so as to remove a portion of the protective coating of the digital disc without removal of the data underlying the protective coating. Optionally, another worktool then contacts the digital disc so as to wax the protective coating of the digital disc. Finally, yet another worktool contacts the digital disc so as to polish the protective coating of the digital disc. Significantly, all of these steps are performed without manual manipulation of the digital disc to thereby provide automated reconditioning of the digital disc within the reconditioning apparatus.

#### Kennedy

Kennedy discloses a multi-step method for reconditioning a compact disc. As discussed in Kennedy, the first step involves removing deep scratches and blemishes on a compact disc in a resurfacing apparatus (such as the apparatus shown in FIGS. 1-6). The second step involves polishing the compact disc in a polishing apparatus (such as the apparatus shown in

FIGS. 7-8). Of course, the resurfacing and polishing apparatuses may be housed within a single cabinet.

In operation, a user places a compact disc in the resurfacing apparatus shown in FIGS. 1-6. As best shown in FIG. 5, the user positions the disc over the end of a shaft 65 whereby the disc will rest on a collar 68. The user then positions a bearing plate 75 over the end of the shaft 65 whereby the bearing plate 75 will rest on the compact disc. The user then threads a locking knob 68 onto the end of the shaft 65 to maintain the compact disc in position for contact with an abrasive disc 100 during the resurfacing process. Kennedy discloses that the resurfacing process preferably involves the progressive use of various grits of the abrasive disc 100 (starting with 30 micron and decreasing to 3 micron). Upon completion of the resurfacing process, the user may remove the compact disc from the resurfacing apparatus by performing the above steps in reverse order.

Next, a user places the compact disc in the polishing apparatus shown in FIGS. 7-8 by positioning the disc over the end of a shaft (not numbered) whereby the disc will rest on a collar (not numbered). The user then positions a bearing plate (not numbered) over the end of the shaft whereby the bearing plate will rest on the compact disc. The user then threads a locking knob 68 onto the end of the shaft to maintain the compact disc in position for contact with a foam pad 91 during the polishing process. Upon completion of the polishing process, the user may remove the compact disc from the polishing apparatus by performing the above steps in reverse order.

#### Cipolla

Cipolla discloses an apparatus for transferring a semiconductor chip from a storage location to a bondhead. In operation, a pickup arm mounted to a body picks up the

semiconductor chip at the storage location, transports the electronic device through space in one continuous motion (such as through a trichoid arc), and then deposits the semiconductor chip at the bondhead. Cipolla discloses that the bondhead is used to bond contact locations on the semiconductor chip to a plurality of beam leads for electrically connecting the semiconductor chip to an electronic packaging substrate.

New Claims 21-40 are Patentable Over Kennedy and Cipolla

Applicant respectfully submits that new claims 21-33 are patentable over Kennedy and Cipolla in that these references do not alone or in combination disclose or suggest an automated method for reconditioning a plurality of digital discs that includes the steps of: (1) holding the digital discs to be reconditioned in a feed area; (2) transferring each of the digital discs from the feed area to at least one workstation with a disc transfer mechanism; and (3) contacting each of the digital discs transferred to the workstation with at least one worktool operable to at least partially recondition the protective coating of each of the digital discs. Rather, as discussed above, Kennedy discloses a method for reconditioning a compact disc that involves a significant amount of manual manipulation of the disc. It would be virtually impossible to modify the apparatuses of Kennedy to automate the reconditioning process due to the manner in which the compact disc is locked onto the shaft via the locking knob. Cipolla merely discloses an apparatus for transferring a semiconductor chip from a storage location to a bondhead. Therefore, new claims 21-33 are patentable over Kennedy and Cipolla.

Applicant also respectfully submits that new claims 34-40 are patentable over Kennedy and Cipolla in that these references do not alone or in combination disclose or suggest an automated method for reconditioning a digital disc placed within a reconditioning apparatus that includes the steps of: (1) contacting the digital disc with at least a first worktool operable to

remove a portion of the protective coating of the digital disc without removal of the data underlying the protective coating; (2) contacting the digital disc with at least a second worktool operable to polish the protective coating of the digital disc; and (3) wherein the contacting steps are performed without manual manipulation of the digital disc to thereby provide automated reconditioning of the digital disc within the reconditioning apparatus. Rather, as discussed above, the reconditioning process of Kennedy involves a significant amount of manual manipulation of the compact disc in order to perform both the resurfacing step and the polishing step. And again, Cipolla merely discloses an apparatus for transferring a semiconductor chip from a storage location to a bondhead. Therefore, new claims 34-40 are patentable over Kennedy and Cipolla.

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In view of the foregoing, it is respectfully submitted that new claims 21-40 are in condition for allowance and eventual issuance, and such action is respectfully requested. Should the Examiner have any further questions or comments that need to be addressed in order to obtain allowance, he is invited to contact the undersigned attorney at the number listed below.

Acknowledgement of receipt is respectfully requested.

Respectfully submitted,

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